

ALTERNATIVE TO PTO/SB/08A/B  
(Based on PTO 08-08 version)

Substitute for form 1449/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/610,313
		Filing Date	July 5, 2000
		First Named Inventor	Susan BARNETT
		Art Unit	1635
		Examiner Name	J. E. Angell
Sheet	1	of	5
		Attorney Docket Number	PAT051386-US-CIP01

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	US-4,652,639-A	03-24-1987	Stabinsky	
	2.	US-4,861,707-A	08-29-1989	Ivanoff et al.	
	3.	US-5,082,767-A	01-21-1992	Hatfield et al.	
	4.	US-5,130,247-A	07-14-1992	Kniskern et al.	
	5.	US-5,156,949-A	10-20-1992	Luciw et al.	
	6.	US-5,688,688-A	11-18-1997	Luciw et al.	
	7.	US-5,786,464-A	07-28-1998	Seed	
	8.	US-5,792,459-A	08-11-1998	Haigwood	
	9.	US-5,795,737-A	08-18-1998	Seed et al.	
	10.	US-5,797,870-A	08-25-1998	March et al.	
	11.	US-5,859,193-A	01-12-1999	Devare et al.	
	12.	US-5,876,724-A	03-02-1999	Girard et al.	
	13.	US-5,990,091-A	11-23-1999	Tartaglia et al.	
	14.	US-6,090,388-A	07-18-2000	Wang	
	15.	US-6,139,843-A	10-31-2000	Rubinstein et al.	
	16.	US-6,280,989-B1	08-28-2001	Kapitonov et al.	
	17.	US-2003/0138453-A1	07-24-2003	O'Hagan et al.	
	18.	US-6,602,705-B1	08-05-2003	Barnett et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials *	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>2</sup> -Number <sup>2</sup> -Kind Code <sup>2</sup> (if known)	MM-DD-YYYY			
	19.	WO-90/00556	01-25-1990	The Government of the United States of America		
	20.	WO-97/48370	12-24-1997	Merck & Co., Inc.		
	21.	WO-98/12207	03-26-1998	The General Hospital Corp.		
	22.	WO-00/29561	05-25-2000	Statens Serum Institut		
	23.	WO-03/20876	03-13-2003	Chiron Corp.		

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials <sup>2</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>3</sup>
	24.	Barnett et al. (June 2001). The ability of an oligomeric human immunodeficiency virus type 1 (HIV-1) envelope antigen to elicit neutralizing antibodies against primary HIV-1 isolates is improved following partial deletion of the second hypervariable region," <i>J Virol</i> . 75(12):5526-40.			

ALTERNATIVE TO PTO/SB/08A/B  
(Based on PTO 08-08 version)

Substitute for form 1449/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/610,313		
		Filing Date	July 5, 2000		
		First Named Inventor	Susan BARNETT		
		Art Unit	1635		
		Examiner Name	J. E. Angell		
Sheet	2	of	5	Attorney Docket Number	PAT051386-US-CIP01

25.	Bolognesi et al. (1994). "NIH conference. HIV vaccine development: a progress report," <i>Ann. Int. Med.</i> 8(7):603-611.	
26.	Borsetti et al., (1998). "The C-terminal half of the human immunodeficiency virus type 1 Gag precursor is sufficient for efficient particle assembly." <i>Viral.</i> 72(11):9313-9317.	
27.	Brusic et al. (1998). "Prediction of MHC class II-binding peptides using an evolutionary algorithm and artificial neural network," <i>Bioinformatics</i> 14(2):121-30.	
28.	Burton et al. (1997). "The antibody response in HIV-1 infection" <i>AIDS</i> 11(Suppl. A):S87-S98.	
29.	Cao et al. (1997) "Replication and neutralization of human immunodeficiency virus type 1 lacking the V1 and V2 variable loops of the gp120 envelope glycoprotein" <i>J. Viral.</i> 71(12):9808-9812.	
30.	Carter, (1994) "Epitope Mapping of a Protein Using the Geysen (PEPSCAN) Procedure," <i>Methods Mol. Biol.</i> 36:207-23.	
31.	Chang et al. (August 2000). "Human immunodeficiency virus type 1 subtype E envelope recombinant peptides containing naturally immunogenic epitopes," <i>J Infect Dis.</i> 182(2):442-50.	
32.	Cheng-Mayer, (1989) "Isolates of human immunodeficiency virus type 1 from the brain may constitute a special group of the AIDS virus," <i>PNAS USA</i> 86:8575-8579	
33.	Dai, L. C., et al. (1992) "Mutation of human immunodeficiency virus type 1 at amino acid 585 on gp41 results in loss of killing by CD8+ A24-restricted cytotoxic T lymphocytes," <i>J. Viral.</i> 66(5):3151-3154.	
34.	Davenport et al. (1995) "An empirical method for the prediction of T-cell epitopes," <i>Immunogenetics</i> 42:392-97.	
35.	Desrosiers, R. C., (2004). "Prospects for an AIDS vaccine," <i>Nat. Med.</i> 10(3):221-223.	
36.	D'Souza et al., (1997). "Evaluation of monoclonal antibodies to human immunodeficiency virus type 1 primary isolates by neutralization assays: performance criteria for selecting candidate antibodies for clinical trials. AIDS Clinical Trials Group Antibody Selection Working Group." <i>J. Infect. Dis.</i> 175:1056-1062.	
37.	Earl et al., (1990). "Oligomeric structure of the human immunodeficiency virus type 1 envelope glycoprotein" <i>PNAS USA</i> 87:648-652.	
38.	Earl et al., (1991). "Biological and immunological properties of human immunodeficiency virus type 1 envelope glycoprotein: analysis of proteins with truncations and deletions expressed by recombinant vaccinia viruses" <i>J. Viral</i> 65:31-41.	
39.	Feller & De La Cruz, (1991). "Identifying antigenic T-cell sites," <i>Nature</i> 349(6311):720-721.	
40.	Fenoglio, D., et al., (2000). "Natural analogue peptides of HIV-1 gp120 T-helper epitope antagonize response of gp120-specific human CD4 T-cell clones," <i>J AIDS</i> 23:1-7.	
41.	Fiore et al. (1994). "The biological phenotype of HIV-1 is usually retained during and after sexual transmission" <i>Viral.</i> 204:297-303.	
42.	Geysen et al. (1984). "Use of peptide synthesis to probe viral antigens for epitopes to a resolution of a single amino acid," <i>PNAS USA</i> 81:3998-4002.	
43.	Hopp, (1993). "Retrospective: 12 Years of Antigenic Determinant Predictions and More," <i>Peptide Research</i> 6:183-90.	
44.	Hu et al., (1992). "Protection of macaques against SIV infection by subunit vaccines of SIV envelope glycoprotein gp160," <i>Science</i> 255:456-459.	
45.	Instructions to Authors, 2008, <i>J. Viral.</i> 82(1):1-19.	
46.	Jameson et al., (1988). "The antigenic index: a novel algorithm for predicting antigenic determinants," <i>CABIOS</i> 4(1):1818-1886.	
47.	Javaherian et al., (1989). "Principal neutralizing domain of the human immunodeficiency virus type 1 envelope protein" <i>PNAS</i> 86:6786-6772.	
48.	Jeffs et al., (1996). "Antigenicity of truncated forms of the human immunodeficiency virus type 1 envelope glycoprotein" <i>J. of Gen. Viral.</i> 77:1403-1410.	
49.	Johnson et al. (1991). <i>The Journal of Immunology</i> 147:1512-13 and 1515-1521.	

ALTERNATIVE TO PTO/SB/08A/B  
(Based on PTO 08-08 version)

Substitute for form 1449/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/610,313		
		Filing Date	July 5, 2000		
		First Named Inventor	Susan BARNETT		
		Art Unit	1635		
		Examiner Name	J. E. Angell		
Sheet	3	of	5	Attorney Docket Number	PAT051386-US-CIP01

50.	Johnson, P. R., et al., (1992). "Identification of overlapping HLA class I-restricted cytotoxic T cell epitopes in a conserved region of the human immunodeficiency virus type 1 envelope glycoprotein: definition of minimum epitopes and analysis of the effects of sequence variation," <i>J. Exp. Med.</i> 175:961-971.	
51.	Kang et al., (1991). "Evidence for non-V3-specific neutralizing antibodies that interfere with gp120/CD4 binding in human immunodeficiency virus 1-infected humans" <i>PNAS USA</i> 88:6171-6175.	
52.	Kolaskar et al. (1990). "A semi-empirical method for prediction of antigenic determinants on protein antigens." <i>FEBS Lett.</i> 276:172-174.	
53.	Kwong et al., (1998). "Structure of an HIV gp120 envelope glycoprotein in complex with the CD4 receptor and a neutralizing human antibody" <i>Nature</i> 393:648-659.	
54.	Lee et al., (2000). "A single point mutation in HIV-1 V3100p alters the immunogenic properties of rgp120," <i>Arch. Virol.</i> 145(10):2087-2103.	
55.	Levitus et al., (1999). "Main features of DNA-based immunization vectors," <i>Brazilian Journal Of Medical And Biological Research</i> 32:147-153.	
56.	Liu, Y., et al., (2006). "Selection on the human immunodeficiency virus type 1 proteome following primary infection," <i>J. Virol.</i> 80(19):9519-9529.	
57.	Lu et al., (1998). "Immunogenicity of DNA vaccines expressing human immunodeficiency virus type 1 envelope glycoprotein with and without deletions in the V1/2 and V3 regions" <i>AIDS Res. Hum. Retroviruses</i> 14(2):151-155.	
58.	Makysulov & Zagrebelskaya, (1993). "ADEPT: a computer program for prediction of protein antigenic determinants," <i>Comput. Appl. Biosci.</i> 9(3):291-297.	
59.	Mammano et al., (1994). "Role of the major homology region of human immunodeficiency virus type 1 in virion morphogenesis" <i>J. Virol.</i> 68(6):4927-4936.	
60.	Mascola et al., (1994). "Two antigenically distinct subtypes of human immunodeficiency virus type 1: viral genotype predicts neutralization serotype" <i>J. Infect. Dis.</i> 169:48-54.	
61.	Matsushita et al., (1988). "Characterization of a human immunodeficiency virus neutralizing monoclonal antibody and mapping of the neutralizing epitope" <i>J. Virol.</i> 62:2107-2144.	
62.	Matthews (1986). "Restricted neutralization of divergent human T-lymphotropic virus type III isolates by antibodies to the major envelope glycoprotein," <i>PNAS USA</i> 83:9709-9713.	
63.	McDougal et al., (1986). "Binding of the human retrovirus HTLV-III/LAV/ARV/HIV to the CD4 (T4) molecule: conformation dependence, epitope mapping, antibody inhibition, and potential for idiotype mimicry" <i>J. Immunol.</i> 137:2937-2944.	
64.	McLain, L., et al., (2001). "Different effects of a single amino acid substitution on three adjacent epitopes in the gp41 C-terminal tail of a neutralizing antibody escape mutant of human immunodeficiency virus type 1," <i>Arch. Virol.</i> 146:157-166.	
65.	Meister et al., (1995). "Two novel T cell epitope prediction algorithms based on MHC-binding motifs; comparison of predicted and published epitopes from Mycobacterium tuberculosis and HIV protein sequences," <i>Vaccine</i> 13(6):581-591.	
66.	Montefiori et al., (1999). "Toward an HIV type 1 vaccine that generates potent, broadly cross-reactive neutralizing antibodies" <i>AIDS Res. Hum. Retroviruses</i> 15(8):689-698.	
67.	Moore et al. (1995). <i>Vaccine</i> 13:1741-1749.	
68.	Nara et al., (1988). "Purified envelope glycoproteins from human immunodeficiency virus type 1 variants induce individual, type-specific neutralizing antibodies" <i>J. Virol.</i> 62:2622-2628.	
69.	Palker et al., (1988). "Type-specific neutralization of the human immunodeficiency virus with antibodies to env-encoded synthetic peptides" <i>PNAS USA</i> 85:1932-1936.	
70.	Pantaleo, G., and R. A. Koup, (2004). "Correlates of immune protection in HIV-1 infection: what we know, what we don't know, what we should know," <i>Nat. Med.</i> 10(8):806-810.	

ALTERNATIVE TO PTO/SB/08/B  
(Based on PTO 08-08 version)

Substitute for form 1449/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/610,313		
		Filing Date	July 5, 2000		
		First Named Inventor	Susan BARNETT		
		Art Unit	1635		
		Examiner Name	J. E. Angell		
Sheet	4	of	5	Attorney Docket Number	PAT051386-US-CIP01

71.	Peng et al., (1997). "Enhancement or inhibition of HIV-1 replication by intracellular expression of sense or antisense RNA targeted at different intermediates of reverse transcription" <i>AIDS</i> 11:587-595.	
72.	Persson, et al. (1998). "Modifications of HIV-1 Retrovirus-like Particles to Enhance Safety and Immunogenicity," <i>Biologicals</i> 26:255-265.	
73.	Putney et al., (1986). "HTLV-III/LAV-neutralizing antibodies to an E. coli-produced fragment of the virus envelope" <i>Science</i> 234:1392-1395.	
74.	Ratner et al., (1985). "Complete nucleotide sequence of the AIDS virus, HTLV-III" <i>Nature</i> 313:277-284.	
75.	Robert-Guroff et al., (1985). "HTLV-III-neutralizing antibodies in patients with AIDS and AIDS related complex" <i>Nature (London)</i> 316:72-74.	
76.	Roberts et al., (1996). "Prediction of HIV Peptide Epitopes by a Nova1 Algorithm," <i>AIDS Res. Hum. Retroviruses</i> 12(7):593-610.	
77.	Rusche et al., (1988). "Antibodies that inhibit fusion of human immunodeficiency virus-infected cells bind a 24-amino acid sequence of the viral envelope, gp120" <i>PNAS USA</i> 85:3198-3202.	
78.	Sanchez-Pescador et al., (1985). "Nucleotide sequence and expression of an AIDS-associated retrovirus (ARV-2)" <i>Science</i> 227(4686):484-492.	
79.	Schwartz, et al. (1992) "Mutational inactivation of an inhibitory sequence in human immunodeficiency virus type 1 results in Rev-independent gag expression," <i>J Virol.</i> 66(12):7176-7182.	
80.	Stamatatos et al., (1998). "Effect of major deletions in the V1 and V2 loops of a macrophage-tropic HIV type 1 isolate on viral envelope structure, cell entry, and replication" <i>AIDS Res. Hum. Retroviruses</i> 14(13):1129-1139.	
81.	Stamatatos et al., (1998). "The ability of an oligomeric human immunodeficiency virus type 1 (HIV-1) envelope antigen to elicit neutralizing antibodies against primary HIV-1 isolates is improved following partial deletion of the second hypervariable region" <i>J. Virol.</i> 72(10):7840-7845.	
82.	Thali et al., (1993). "Characterization of conserved human immunodeficiency virus type 1 gp120 neutralization epitopes exposed upon gp120-CD4 binding" <i>J. Virol.</i> 67(7):3978-3988.	
83.	Trkola et al., (1995). "Cross-clade neutralization of primary isolates of human immunodeficiency virus type 1 by human monoclonal antibodies and tetrameric CD4-IgG" <i>J. Virol.</i> 69(11):6609-6617.	
84.	Watkins, B. A., et al., (1993). "Immune escape by human immunodeficiency virus type 1 from neutralizing antibodies: evidence for multiple pathways," <i>J. Virol.</i> 67(12):7493-7500.	
85.	Weiss et al., (1985). "Neutralization of human T-Lymphotropic virus type III by sera of AIDS and AIDS-risk patients" <i>Nature (London)</i> 316:69-72.	
86.	Weiss et al., (1986). "Variable and conserved neutralization antigens of human immunodeficiency virus" <i>Nature (London)</i> 324:572-575.	
87.	Welling et al., (1985). "Prediction of sequential antigenic regions in proteins," <i>FEBS Lett.</i> 188:215-18.	
88.	Wyatt et al., (1995). "Involvement of the V1N2 variable loop structure in the exposure of human immunodeficiency virus type 1 gp120 epitopes induced by receptor binding" <i>J. Virol.</i> 69(9):5723-5733.	
89.	Wyatt et al., (1998). "The antigenic structure of the HIV gp120 envelope glycoprotein" <i>Nature</i> 393:705-711.	
90.	Zhu et al., (1993). "Genotypic and phenotypic characterization of HIV-1 patients with primary infection," <i>Science</i> 261:1179-1181.	
91.	zur Megeede et al., (2006). "Evaluation of human immunodeficiency type 1 subtype C gag, pol, and gagpol DNA and alphavirus replicon vaccines," <i>Vaccine</i> 24:2755-2763.	

ALTERNATIVE TO PTO/SB/08A/B  
(Based on PTO 08-08 version)

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>			
		Application Number	09/610,313		
		Filing Date	July 5, 2000		
		First Named Inventor	Susan BARNETT		
		Art Unit	1635		
		Examiner Name	J. E. Angell		
Sheet	5	of	5	Attorney Docket Number	PAT051386-US-CIP01

	92.	zur Megede et al., (June 2003). "Expression and Immunogenicity of Sequence-modified Human Immunodeficiency Virus Type 1 Subtype B pol and gagpol DNA Vaccines," <i>J Virol</i> . 77(11):6197-6207.	
--	-----	--	--

Examiner Signature	/Jon Angell/	Date Considered	09/05/2010
-----------------------	--------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

/Applicant's unique citation designation number (optional). \*Applicant is to place a check mark here if English language Translation is attached.